## Fiscal Year 2014 DOE/NNSA Strategic Performance Evaluation Plan (PEP)

## **FOR**

# MANAGEMENT AND OPERATION OF THE Lawrence Livermore National Laboratory

Contract Number: DE-AC52-07NA27344

Performance period: October 01, 2013 through September 30, 2014

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#### INTRODUCTION

Lawrence Livermore National Laboratory is a Federally Funded Research and Development Center (FFRDC) owned by the United States Department of Energy (DOE), herein referenced as "Laboratory." It is managed by Lawrence Livermore National Security, LLC (LLNS). Pursuant to the terms and conditions of the Contract, and Clause H-13 *Performance Based Management*, this Performance Evaluation Plan (PEP) sets forth the criteria in which the Laboratory performance will be evaluated and upon which the determination of the amount of award fee earned shall be based. The available award fee amounts for FY 2014 are specified in Section B-2 of Contract No. DE-AC52-07NA27344. This PEP promotes a strategic Governance and Oversight framework based on prudent management of risk, accountability, transparency, and renewed trust. It has been written to implement the collective governance and oversight reform principles as expressed by the DOE/National Nuclear Security Administration (NNSA).

#### PERFORMANCE BASED APPROACH

The performance-based approach evaluates the Laboratory's performance through a set of performance objectives (PO). Each PO, and its associated Contributing Factors (CF) and Site Specific Outcomes (SSO) will be measured against authorized work and the respective outcomes, demonstrated performance, and impact to the DOE/NNSA mission. CFs and SSOs will be assessed in the aggregate to establish an adjectival performance rating for each Performance Objective. Notwithstanding the overall strategic framework, failure to achieve an individual SSO, the most important DOE/NNSA fiscal year objectives at the laboratory, may limit the award-fee.

#### **MISSION**

LLNS shall manage, operate, protect, sustain and enhance the Laboratory's ability to function as a NNSA Multi-Program Laboratory, while assuring accomplishment of the Laboratory's primary mission - strengthening the United States' security through development and application of world-class science and technology to enhance the nation's defense and to reduce the global threat from terrorism and weapons of mass destruction. LLNS shall, with the highest degree of vision, quality, integrity and technical excellence, maintain a strong, multi-disciplinary scientific and engineering base responsive to scientific issues of national importance in addition to national security responsibilities, including broadly based programs in such areas as the environment, national infrastructure, health, energy, economic and industrial competitiveness, and science education.

#### MISSION PERFORMANCE

The Laboratory is accountable for and will be evaluated on successfully executing program work in accordance with applicable DOE/NNSA safety and security requirements consistent with the terms and conditions of the Contract. Protection of worker and public safety, the environment, and security are essential and implicit elements of successful mission performance. Accordingly, the model for this PEP is to rely on the Laboratory's leadership to use appropriate DOE contractual requirements and recognized industrial standards based on consideration of assurance systems, and the related measures, metrics, and evidence. The Laboratory is expected to manage in a safe, secure, efficient, effective, results-driven manner, with appropriate risk management and transparency to the government, while taking appropriate measures to minimize costs that do not compromise core objectives and mission performance. Products are expected to be delivered on-schedule and within budget.

#### CONSIDERATION OF CONTEXT IN PERFORMANCE EVALUATION

The evaluation of performance will consider "context" such as unanticipated barriers (e.g., budget restrictions, rule changes, circumstances outside Laboratory control), degree of difficulty, significant accomplishments, and other events that may occur during the performance period. Effective efforts by the Laboratory to quickly identify, self-report, and overcome or mitigate the impact of issues, barriers or other circumstances will also be a factor in evaluating performance. A significant safety or security event may result in an overall limitation to adjectival ratings.

#### PERFORMANCE RATING PROCESS

At the end of each of the first three quarters, DOE/NNSA will evaluate performance and provide feedback to the Laboratory highlighting successes and/or needed improvement. At the end of the year, an overall performance rating will be assigned for each PO using the table in Federal Acquisition Regulation Subpart 16.401(e)(3) yielding scores of Excellent, Very Good, Good, Satisfactory or Unsatisfactory. In general, performance objectives and contributing factors are written to reflect an overall adjectival performance level of **Good**. DOE/NNSA will consider the Laboratory end of year self-assessment report in preparing the Performance Evaluation Report (PER) for the Fee Determining Official (FDO). The PER transmits the final recommendations on performance ratings and award fee earned for the award fee period of performance. The unilateral decision of the total award fee earned will be made by the FDO.

#### PEP CHANGE CONTROL

It is essential that a baseline of performance expectations be established at the beginning of the performance period to equitably measure performance, and that changes to that baseline are carefully managed. Any change to the PEP requires concurrence by the appropriate program office, NA-00 and the NNSA Senior Procurement Executive prior to the Field Office Manager and Contracting Officer signatures. While recognizing the unilateral rights of DOE/NNSA as expressed in contract clauses H-13*Performance Based Management*, and H-15 *Performance Incentives*, bilateral changes are the preferred method of change whenever possible.

#### FINAL DECISION

Prior to a final decision by the FDO the Laboratory Director will have a face-to-face opportunity to provide a final presentation in support of strategic performance determination and direction of the enterprise.

## TOTAL AVAILABLE AWARD FEE ALLOCATION

Performance Category	Performance Objective	% At-Risk Fee Allocation
Programs (NA-10 & FOM)	PO-1: Manage the Nuclear Weapons Mission	20%
Programs (NA-2 & FOM)	PO-2: Broader National Security Mission	20%
Programs (NA1.1 & FOM)	PO-3: Science, Technology, and Engineering and Other DOE Mission Objectives	20%
Operations & Mission Execution (NA-3 & FOM)	PO-4: Operations & Infrastructure	20%
Operations & Mission Execution (NA-1 & FOM)	PO-5: Leadership	20%

#### UNEARNED FEE

DOE/NNSA reserves the right to withdraw and redistribute DOE/NNSA unearned fees.

#### AWARD TERM INCENTIVE

To be eligible to earn award term the Laboratory must earn an adjectival score of Very Good or better in four of the five Performance Objectives and receive no adjectival score of Satisfactory or lower in any Performance Objective.

#### INNOVATIVE SOLUTIONS

The Laboratory will recommend innovative, science-based, systems-engineering solutions to the most challenging problems that face the nation and the globe. The Laboratory will also provide evidence to support programmatic needs and operational goals tempered by risk. DOE/NNSA will take into consideration all major functions contributing to mission success. In addition, the Laboratory is expected to recommend and implement innovative business and management improvement solutions that enhance efficiencies.

PO-1: Manage the Nuclear Weapons Mission – NA-10 & FOM - (At-Risk Fee: 20%) Successfully execute Nuclear Weapons mission work in accordance with DOE/NNSA Priorities, Program Control Document and Deliverables, and Program Implementation Plans. Integrate across the laboratory, while maintaining a DOE/NNSA enterprise-wide focus, to achieve greater impact on a focused set of strategic national security priorities. Provide defensible objective evidence.

## **Contributing Factors:**

- CF-1.1 Accomplish work as negotiated with program sponsors and partners, achieving the expected level of quality to ensure safe, secure, reliable weapon performance, transportation, and cost effective operations.
- CF-1.2 Increase knowledge of the state of the stockpile, resulting from successful execution of the stockpile surveillance program and a robust scientific and engineering understanding for the delivery of the annual stockpile assessment.
- CF-1.3 Execute deliveries for the stockpile work to meet limited-life component exchanges, and dismantlements.
- CF-1.4 Demonstrate the application of new strategies, technologies, and scientific understanding to support stewardship of the existing stockpile and future stockpile needs.
- CF-1.5 Sustain and strengthen unique science and engineering capabilities, facilities and essential skills to ensure current and future Nuclear Weapons mission requirements will be met.
- CF-1.6 Execute W78/88-1 phase 6.2 activities, B61-12 phase 6.3 activities, and W88 ALT 370 phase 6.3 activities in accordance with the NNSA approved schedules.

- 1.1 Execute shots on NIF in support of the Stockpile Stewardship Program in accordance with the NIF Governance Plan, while meeting the challenge of operating NIF efficiently at a substantially reduced operating budget.
- 1.2 Execute stockpile relevant SNM and Integrated Experiments including for example, material property experiments on JASPER and HED facilities, and hydrotests on CFF and DARHT and provide technical capabilities supporting reuse of pits in the future stockpile.
- 1.3 Develop advanced computing architectures, algorithms and software to support next-generation high performance computing for stockpile stewardship, including advanced software for user interfaces.
- Develop and implement surveillance metrics that accurately assess the state of the Surveillance Program.
- 1.5 Effectively manage the CORAL project, execute the acquisition strategy, and meet the schedule milestones, working closely with Argonne National Laboratory and Oakridge National Laboratory.

1.6 Implement project controls that enhance program cost, scope, and schedule. In particular implement Earned Value Management System (EVMS) consistent with the W78/88-1 and W88 ALT 370 Project Control Systems Description and Implementation Schedule and Enhance the Joint Integrated Lifecycle Surety (JILS) tool to incorporate additional aspects of surety and provide cost-benefit assessments. Sites are allowed to tailor EVMS implementation to account for program complexity, cost, and risks, subject to approval of the Federal Program Manager.

## PO-2: Broader National Security Mission – NA-2 & FOM - (At-Risk Fee: 20%)

Successfully execute authorized broader national security mission work to include the Non-Proliferation, Emergency Operations and Counterterrorism missions as well as high-impact interagency work. Integrate across the laboratory, while maintaining an NNSA enterprise-wide focus, to achieve greater impact on a focused set of strategic national security priorities. Provide defensible objective evidence.

#### Contributing Factors:

- CF-2.1 Support efforts to remove, eliminate and minimize the use of proliferation-sensitive materials.
- CF-2.2 Support efforts to safeguard and secure materials, technologies, and facilities.
- CF-2.3 Support efforts to detect and prevent the illicit trafficking of nuclear/radiological materials, technology, information and expertise.
- CF-2.4 Provide R&D technology solutions for treaty monitoring, minimizing the use of proliferation-sensitive materials, and the application of safeguards and security.
- CF-2.5 Provide unique technical/policy solutions and develop programs/strategies to reduce nuclear/radiological dangers.
- CF-2.6 Demonstrate effective operations and implementation of policy for mission success in support of emergency management, incident response and nuclear forensics mission support capability.
- CF-2.7 Sustain and improve nuclear counterterrorism and counterproliferation science, technology, and expertise.
- CF-2.8 Pursue and perform high-impact interagency work that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities and essential skills in support of future national security mission requirements.
- CF-2.9 Accomplish work within the budget profile, scope, cost, schedule, quality and risk negotiated with the program sponsors or partners.

- 2.1 Develop capabilities for remotely monitoring reactor operations.
- 2.2 Execute nuclear threat device "task list" and materials work; stand up transformed Nuclear Assessment Operations to execute Disclosure and Discovery Assessment and Response Rubric Activities; and provide technical leadership for selected Safe to Fire experimental and modeling efforts.
- 2.3 Provide requested planning and execution assets for NUWAIX14, the DOE/NNSA-led nuclear weapons accident/incident exercise.

# PO-3: Science, Technology, and Engineering (ST&E) and Other DOE Mission Objectives – NA-1.1 & FOM - (At-Risk Fee: 20%)

Successfully advance national security missions and advance the frontiers of ST&E in accordance with budget profile, scope, cost, schedule and risk while achieving the expected level of quality. Execute other DOE Mission Objectives for programs such as Environmental Management in accordance with the budget profile, scope, cost, and schedule. Effectively manage Laboratory Directed Research and Development Programs (LDRD) to advance the frontiers of ST&E. Provide defensible ojective evidence.

## Contributing Factors:

- CF-3.1 Implement a research strategy that is clear and aligns discretionary investments (e.g., LDRD) with the research strategy and support DOE/NNSA priorities.
- CF-3.2 Ensure that research is relevant, enables the national security missions, and benefits DOE/NNSA and the nation.
- CF-3.3 Ensure that research is transformative, innovative, leading edge, high quality, and advances the frontiers of science and engineering.
- CF-3.4 Maintain a healthy and vibrant research environment that enhances technical workforce competencies and research capabilities.
- CF-3.5 Perform research to accomplish the high priority, multi-year research objectives, advance ST&E, and develop technologies for the public good through technology transfer.
- CF-3.6 Pursue and perform high impact work that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities and essential skills in support of future national security mission requirements.
- CF-3.7 Accomplish work within the budget profile, scope, cost, schedule, risk, and quality negotiated with the program sponsors or partners.

- Develop new relationships with federal agencies, academia, industry, other laboratories, state and local governments and leverage innovative technology transfer outreach strategies to support innovation and tech transfer effectively using the LVOC.
- 3.2 Demonstrate that institutional investments are being effectively used to assure the successful execution of the Laboratory's strategic ST&E Plan.

## PO-4: Operations & Infrastructure – NA-3 & FOM - (At-Risk Fee: 20%)

Effectively and efficiently manage the safe & secure operations of the laboratory while maintaining an NNSA enterprise-wide focus; demonstrate accountability for mission performance and management controls; assure mission commitments are met with high-quality products and services; and maintain excellence as a 21<sup>st</sup> century government-owned, contractor-operated facility.

## Contributing Factors:

- CF-4.1 Deliver effective, efficient, and responsive environment, safety and health (ES&H) management and processes.
- CF-4.2 Accomplish capital projects in accordance with scope, cost, and schedule baselines.
- CF-4.3 Deliver effective, efficient, and responsive physical, information and cyber security management and processes.
- CF-4.4 Maintain, operate and modernize the DOE/NNSA facilities, infrastructure, and equipment in an effective, energy efficient manner; including disposition of unneeded infrastructure and excess hazardous materials.
- CF-4.5 Deliver efficient, effective and responsible business operations and systems.
- CF-4.6 Deliver efficient and effective management of legal risk and incorporation of best legal practices.

- 4.1 Develop an integrated and systematic security risk management process that balances the needs of security with operational efficiency and cost effectiveness. This process should enable formal governance of security operations, and be documented in the LLNL Site Security Plan.
- 4.2 Continue to strengthen and demonstrate continuous improvement in the institutional Quality Assurance/Software Quality Assurance Programs and their implementation in the PADs, including effective implementation of the revised Software Quality Assurance Program.
- 4.3 Continue to demonstrate improvement in Work Control implementation consistent with LLNS management initiatives in response to the Site 300 acid event and associated extent of condition review lessons learned.

## PO-5: Leadership -NA-1 & FOM -(At-Risk Fee: 20%)

Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, the responsiveness of the laboratory leadership team to issues and opportunities for continuous improvement internally and across the Enterprise, and parent company involvement/commitment to the overall success of the laboratory and the Enterprise.

#### Contributing Factors:

- CF-5.1 Define and implement a realistic strategic vision for the laboratory, in alignment with the NNSA Strategic Plan, which demonstrates enterprise leadership and effective collaborations across the NNSA enterprise to ensure DOE/NNSA success.
- CF-5.2 Promote a culture of critical self-assessment and transparency across all areas; instill a culture of accountability, responsibility, and performance through the entire organization; and coordinate/communicate these key issues and concerns to DOE/NNSA leadership.
- CF-5.3 Demonstrate performance results through the institutional utilization of the Management Assurance System and the leveraging of parent company resources and expertise.
- CF-5.4 Work selflessly within the DOE/NNSA complex to develop, integrate, and implement enterprise solutions that maximize program outputs at best value to the government; identify innovative business and management solutions that greatly improve enterprise-wide efficiencies.
- CF-5.5 Exhibit professional excellence in performing roles/responsibilities while pursuing opportunities for continuous learning.